

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of	)	
	)	
115 License Subsidiary, LLC	)	IBFS File Nos. SAT-LOA-20060412-00044
	)	Call Sign: S2700
17/24 GHz Broadcasting-Satellite Service	)	
Space Station at the 115.0° W.L. Orbital Location;	)	
Ruling on Milestones Completion	)	

**ORDER**

**Adopted: March 30, 2015**

**Released: March 30, 2015**

By the Chief, International Bureau:

**I. INTRODUCTION**

1. With this Order, we deny the request of 115 License Subsidiary, LLC (115 LicenseSub) for a determination that it met the first two system implementation milestones associated with its surrendered authorization to construct, launch and operate a 17/24 GHz Broadcasting-Satellite Service (BSS) space station at the 115.0° W.L. orbital location.<sup>1</sup> We find that 115 LicenseSub failed to satisfy the milestones and we are therefore unable to grant its request to release its performance bond for satisfaction of the first two milestones. Accordingly, the maximum sum of 115 LicenseSub's satellite performance bond – three million dollars – is due under its terms to the U.S. Treasury.

**II. BACKGROUND**

**A. Milestone Policy**

2. For decades, the Commission has required satellite licensees to meet system implementation milestones.<sup>2</sup> The Commission's rules impose milestones as conditions of any license to construct, launch, and operate a geostationary (GSO) satellite,<sup>3</sup> or for a grant of U.S. market access for non-U.S. licensed and not-yet-operational space stations.<sup>4</sup> These milestones are: 1) execute a binding contract for construction within one year of grant; 2) complete critical design review (CDR) within two years of grant; 3) commence construction within three years of grant; and 4) launch and begin operations within five years of grant. The milestones track the three-to-five year period typically needed to complete construction and launch of a satellite. The schedule of milestones is designed to ensure that satellites will

<sup>1</sup> See Grant Stamp and Attachment to Grant for IBFS File Nos. SAT-LOA-20060412-00044 and SAT-AMD-20080114-00023 (granted Dec. 17, 2008) (115 LicenseSub Authorization).

<sup>2</sup> See, e.g., *ATCONTACT Communications, LLC Petition for Reconsideration and Motion for Stay*, Order, 25 FCC Rcd 7567, 7573 ¶ 15 (2010) (*ATCONTACT Order*); *Emergency Application for Review and Request for Stay of Globalstar, L.P.*, Memorandum Opinion and Order, 19 FCC Rcd 11548, ¶ 2 (2004) (*Globalstar Order*); *Licensing of Space Stations in the Domestic Fixed-Satellite Service*, Report and Order, CC Docket No. 81-704, 48 Fed. Reg. 40233, 40266, ¶ 82 (1983).

<sup>3</sup> 47 C.F.R. § 25.164(a).

<sup>4</sup> 47 C.F.R. § 25.137(d).

be launched in a timely manner, and that the orbit spectrum resource is not being held by parties unable or unwilling to proceed with their plans.<sup>5</sup>

3. In the 2003 *Space Station Licensing Reform Order*, the Commission emphasized milestones as a component of safeguards designed to discourage speculative applications and to help ensure timely implementation of space stations, which generally cost several hundred million dollars each to launch and operate.<sup>6</sup> In addition to a requirement to construct and launch a satellite consistent with the milestone schedule specified in Section 25.164(a) of the Commission's rules,<sup>7</sup> these safeguards require posting of a \$3 million bond with the Commission within 30 days of grant.<sup>8</sup> The amount of the bond may be reduced as individual milestones are met.<sup>9</sup> The burden of proof for milestone compliance is on the party certifying compliance.<sup>10</sup> A party is considered in default on a bond if it fails to meet any milestone, in which case the license becomes null and void, and the outstanding balance of the bond is paid to the U.S. Treasury.<sup>11</sup> The bond and milestone requirements apply to 17/24 GHz BSS systems, including the one that 115 LicenseSub was licensed to build and operate.<sup>12</sup>

#### B. Pegasus/115 LicenseSub License

4. On December 17, 2008, the Satellite Division of the International Bureau granted authority to Pegasus Development DBS Corporation, to construct, launch and operate a 17/24 GHz BSS space station at the 115.0° W.L. orbital location.<sup>13</sup> Pegasus Development DBS Corporation later assigned the authorization to 115 LicenseSub, a wholly-owned subsidiary.<sup>14</sup> The license was among the first issued for a 17/24 GHz BSS space station.<sup>15</sup>

<sup>5</sup> *Globalstar Order*, 19 FCC Rcd at 11548-49, ¶ 2.

<sup>6</sup> *Amendment of the Commission's Space Station Licensing Rules and Policies*, First Report and Order and Further Notice of Proposed Rulemaking, 18 FCC Rcd 10760, 10827-38, ¶¶ 173-208 (2003) (*Space Station Licensing Reform Order*).

<sup>7</sup> 47 C.F.R. § 25.164(a).

<sup>8</sup> 47 C.F.R. § 25.165(a)(2).

<sup>9</sup> 47 C.F.R. § 25.164(d).

<sup>10</sup> *Space Station Licensing Reform Order*, 18 FCC Rcd at 10833-34, ¶¶ 191-93.

<sup>11</sup> 47 C.F.R. § 25.165; *Space Station Licensing Reform Order*, 18 FCC Rcd at 10824-25, ¶¶ 166-67.

<sup>12</sup> *Establishment of Policies and Service Rules for the Broadcasting-Satellite Service at the 17.3-17.7 GHz Frequency Band and at the 17.7-17.8 GHz Frequency Band Internationally, and at the 24.75-25.25 GHz Frequency Band for Fixed Satellite Services Providing Feeder Links to the Broadcasting-Satellite Service and for the Satellite Services Operating Bi-directionally in the 17.3-17.8 GHz Frequency Band*, Report and Order and Further Notice of Proposed Rulemaking, IB Docket No 06-123, 22 FCC Rcd 8842, 8850, ¶ 15 (2007) (*17/24 GHz BSS Report and Order*).

<sup>13</sup> See 115 LicenseSub Authorization.

<sup>14</sup> See Pegasus Development DBS Corp., Application for Pro Forma Assignment, IBFS File No. SAT-ASG-20090921-00098 (filed Sept. 21, 2009).

<sup>15</sup> *Establishment of Policies and Service Rules for the Broadcasting-Satellite Service at the 17.3-17.7 GHz Frequency Band and at the 17.7-17.8 GHz Frequency Band Internationally, and at the 24.75-25.25 GHz Frequency Band for Fixed Satellite Services Providing Feeder Links to the Broadcasting-Satellite Service and for the Satellite Services Operating Bi-directionally in the 17.3-17.8 GHz Frequency Band*, Second Report and Order, 26 FCC Rcd 8927, Appendix D (2011) (showing a list of orbital locations for granted and pending 17/24 GHz BSS authorizations).

5. Consistent with Section 25.164 of the Commission's rules, the Satellite Division imposed a schedule of milestones on the authorization. Specifically, the licensee had to satisfy five milestones: 1) execute a binding contract for construction within one year (by December 17, 2009); 2) complete the CDR within two years (by December 17, 2010); 3) commence construction within three years (by December 17, 2011); and 4) launch and begin operations within five years (by December 17, 2013).<sup>16</sup> In addition, 115 LicenseSub was required to post a bond for \$3 million within 30 days of grant.<sup>17</sup> The milestones were incorporated as a condition of the authorization, which also specifically provided that failure to comply with any milestone would render the authorization null and void.<sup>18</sup> On January 16, 2009, the licensee submitted to the Commission the required \$3 million performance bond.<sup>19</sup> On December 16, 2009, 115 LicenseSub executed a contract with Space Systems/Loral Inc. (Loral) and provided the Commission with a copy of this document the following day.<sup>20</sup>

6. The first year of the contract was marked by a pattern of deferred payments, resulting in only a few small payments being made to Loral.<sup>21</sup> In April 2010, 115 LicenseSub filed a letter from Loral acknowledging receipt of an initial payment due upon execution of the contract.<sup>22</sup> Following the initial payment, the payment plan in the contract specified monthly milestones. Nine of the twelve monthly milestones were identically devoted to "program definition and system engineering," and none of those milestones required a payment.<sup>23</sup> Of the remaining three monthly milestones in the first year, months four

<sup>16</sup> The license also included a condition requiring, within two years and two months of licensing, completion of coordination of the physical operations of the station with operators of space stations with overlapping station keeping volumes. This condition, however, is not relevant to the determination concerning milestones and bond default in this Order, as any reduction in the bond amount would be in connection with satisfaction of other milestone conditions.

<sup>17</sup> 115 LicenseSub Authorization at condition 4.

<sup>18</sup> *Id.*

<sup>19</sup> See Policy Branch Information Actions Taken, *Public Notice*, Report No. SAT-00576, DA No. 09-173 (rel. Jan. 30, 2009) (informative notice that bond was filed). See also Pegasus Satellite License Bond – 115° West Longitude, Bond Number 104169931, between Pegasus Development DBS Corporation and Travelers Casualty and Surety Company of America, submitted to the Commission on January 16, 2009.

<sup>20</sup> Letter from Bruce D. Jacobs and Tony Lin, Counsel for 115 License Subsidiary, LLC to Marlene H. Dortch, Secretary, FCC (Dec. 17, 2009) (transmittal letter and request for confidential treatment of non-redacted version of filing). Consistent with Commission policy, 115 LicenseSub also submitted, in the electronic International Bureau Filing System, a redacted version of the contractual documents for the public record (Redacted Contract).

<sup>21</sup> Throughout this Order, the terms "small" and "substantial" are used to describe payments made on satellite construction contracts. Satellite construction contracts are filed with the Commission on a confidential basis and licensees do not reveal the financial sums related to the construction of satellites to the public. As the Commission stated in the *Space Station Licensing Reform Order*, "we have recognized that specific dollar amounts ... warrant confidential treatment." 18 FCC Rcd at 10832, ¶ 187. This classification of "small" and "substantial" is based upon a review and comparison of the present contract to other satellite contracts with the same satellite manufacturer for which construction has been completed. While there is no specific threshold for "small" or "substantial" payments, "small" payments typically fall in the hundreds of thousands of dollars while "substantial" payments fall in the tens of millions of dollars or more.

<sup>22</sup> Letter from Tony Lin, Counsel to 115 License Subsidiary, LLC, to Marlene H. Dortch, Secretary, FCC (April 8, 2010) (with attached Letter from Christopher F. Hoeber, Sr. Vice President, Loral, to Scott A. Blank, Sr. Vice President and General Counsel of 115 License Subsidiary, LLC (April 7, 2010)) (April 8, 2010 Letter). While both letters recited that Loral had received "all payments due under the contract" as of the date of Loral's letter, the initial payment at execution was the only payment due under the contract as of that date; a scheduled "milestone month 4" payment was not due when those letters were submitted.

<sup>23</sup> Redacted Contract, Exhibit E, the "Payment Plan and Termination Liability Schedule (12/14/09) (*Redacted Exhibit E*), "program definition and system engineering" specified at milestone months 1-3, 5-8, 10 and 12.

and nine provided for a small “calendar payment,” and month 11 was to be the CDR, together with a fourth small payment, scheduled to occur in the month before the CDR milestone specified in the license.<sup>24</sup>

7. The second payment due under the contract as initially executed was due in month four.<sup>25</sup> 115 LicenseSub did not make that payment. Instead, the parties amended the payment schedule in Exhibit E of the contract to defer the payment due date by three months, to July 31, 2010.<sup>26</sup> Shortly before that deferred payment date, the parties again amended Exhibit E to further defer payments.<sup>27</sup> As a result of the two amendments, no payments were due under the contract for months one through eight.<sup>28</sup> On August 26, 2010, 115 LicenseSub made its first small “monthly payment,” for month nine, one week after the Satellite Division first inquired about payments made under the contract.<sup>29</sup> 115 LicenseSub made two additional small payments in months 10 and 11.<sup>30</sup> On December 15, 2010, 115 LicenseSub certified that it had complied with the CDR milestone.<sup>31</sup>

8. The pattern of payment deferral continued into the second year of the contract. In May 2011, 115 LicenseSub and Loral agreed to defer all payments due for months 13 through 19.<sup>32</sup> Loral’s milestone description for all of the deferred months called for “system engineering.”<sup>33</sup> In sum, as a result of the parties’ amendments to the contract, “[n]o payments were due under the contract for milestones month 1 through 8 or 12 through 19, as specified in Exhibit E of the contract, as amended.”<sup>34</sup> After the parties’ amendments and revisions, 115 LicenseSub’s first significant payment was not due until month 20, in August 2011, ten months after the CDR milestone specified in the license. 115 LicenseSub did not make this payment.<sup>35</sup>

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<sup>24</sup> *Id.*

<sup>25</sup> *Id.*

<sup>26</sup> Letter from Tony Lin, Counsel to 115 License Subsidiary, LLC to Robert Nelson, Chief, Satellite Division, International Bureau, FCC, at 2 (Aug. 27, 2010) (Redacted August 27, 2010 115 LicenseSub Letter). This letter was in response to a request for information from the Satellite Division. Letter from Robert G. Nelson, Chief, Satellite Division, International Bureau, FCC to Tony Lin, Counsel to 115 License Subsidiary, LLC (Aug. 19, 2010).

<sup>27</sup> Redacted August 27, 2010 115 LicenseSub Letter, revising the payment plan for months 7-13, in Revision 1 (July 27, 2010) of Exhibit E.

<sup>28</sup> *Id.* at Appendix A – Summary of Payments.

<sup>29</sup> *Id.* at 2 and Appendix A – Summary of Payments.

<sup>30</sup> Letters from Bruce D. Jacobs and Tony Lin, Counsel to 115 License Subsidiary, LLC to Robert Nelson, Chief, Satellite Division, International Bureau, FCC (Sept. 30, 2010 and Nov. 2, 2010).

<sup>31</sup> Letter from Tony Lin, Counsel to 115 License Subsidiary, LLC to Robert Nelson, Chief, Satellite Division, International Bureau, FCC (Dec. 15, 2010).

<sup>32</sup> Letter from Tony Lin, Counsel to 115 License Subsidiary, LLC to Robert Nelson, Chief, Satellite Division, International Bureau, FCC, Appendix A – Summary of Payments (Aug. 26, 2011) (Redacted August 26, 2011 115 LicenseSub Letter). This letter was in response to a Satellite Division request for additional information July 27, 2011. Letter from Robert G. Nelson, Chief, Satellite Division, International Bureau, FCC to Tony Lin, Counsel to 115 License Subsidiary, LLC (July 27, 2011).

<sup>33</sup> *Id.*

<sup>34</sup> Redacted August 26, 2011 115 LicenseSub Letter.

<sup>35</sup> *Id.*

9. On December 16, 2011, 115 LicenseSub filed a request to extend its commencement of construction milestone for a period of one year after Commission action on the request.<sup>36</sup> On May 2, 2012, 115 LicenseSub announced that it was no longer pursuing the implementation of its 17/24 GHz BSS system.<sup>37</sup> 115 LicenseSub simultaneously withdrew and requested dismissal of three pending applications associated with the authorization, including the request to extend the commencement of construction milestone.<sup>38</sup> 115 LicenseSub also requested that the Bureau conclude that 115 LicenseSub met the first two milestone conditions in the license.<sup>39</sup>

### III. DISCUSSION

#### A. Milestones Determination

10. At the time 115 LicenseSub surrendered its authorization on May 2, 2012, the first three of the standard GSO milestone dates in the authorization had passed.<sup>40</sup> In the surrender letter, 115 LicenseSub requested that the Bureau conclude that it met the first two milestone requirements – the contract and CDR milestones. 115 LicenseSub did not request that the Bureau conclude that it met the commence construction milestone.<sup>41</sup> Because our determination will affect the amount of 115 LicenseSub's bond paid to the U.S. Treasury, we therefore review, in turn, the standards the Commission has established for evaluating whether the contract and CDR milestones are met, and measure 115 LicenseSub's compliance.

##### 1. Contract Milestone

11. The Commission has viewed the first milestone – the contract milestone – as especially important because it provides an early objective indication of whether a licensee is committed to proceeding with implementation of its proposal.<sup>42</sup> The Commission established the criteria for meeting the first milestone in the *Tempo Order*.<sup>43</sup> Since the *Tempo Order*, the Commission has clarified the contract milestone analysis. The Commission applies two general principles in reviewing compliance with the contract milestone: (1) the contract must be binding and non-contingent; and (2) the contract must demonstrate the parties' investment and show that the licensee is committed to completing the construction of the satellite system within the time frame specified in the license.<sup>44</sup> Substantial FCC

<sup>36</sup> 115 License Subsidiary, LLC, Request for Extension of Milestone, Call Sign S2700, IBFS File No. SAT-MOD-20111216-00240, Narrative at 8 (Dec. 16, 2011) (115 LicenseSub Request for Extension of Milestone).

<sup>37</sup> Letter from Tony Lin, Counsel to 115 License Subsidiary, LLC to Marlene H. Dortch, Secretary, FCC (May 2, 2012).

<sup>38</sup> On May 2, 2012, the International Bureau returned these three applications without action on them, as requested by 115 License Sub. See Public Notice, *Policy Branch Information: Actions Taken*, DA 12-823, Report No. SAT-00870, IBFS File Nos. SAT-MOD-20111216-00240, SAT-MOD-20120315-00050, and SAT-T/C-20110630-00124 (May 25, 2012).

<sup>39</sup> *Id.*

<sup>40</sup> Specifically, 115 LicenseSub's standard GSO milestones to that date were: Contract execution on December 17, 2009, Critical Design Review on December 17, 2010, and Commence Construction on December 17, 2011.

<sup>41</sup> 115 LicenseSub had filed a letter certifying that it had met its commence construction deadline. Letter from Tony Lin, Counsel to 115 License Subsidiary, LLC to Robert Nelson, Chief, Satellite Division, International Bureau, FCC (Feb. 16, 2011).

<sup>42</sup> *Globalstar Order*, 19 FCC Rcd at 11551, ¶ 7.

<sup>43</sup> *Tempo Enterprises, Inc.*, Memorandum Opinion and Order, 1 FCC Rcd 20, 21, ¶ 7 (1986) (*Tempo Order*).

<sup>44</sup> *Globalstar Order*, 19 FCC Rcd at 11551, ¶ 7 (citing *Tempo Order*, 1 FCC Rcd at 21, ¶ 7).

precedent has applied these two principles, providing further guidance in making the determination requested by 115 LicenseSub here, as to whether it met the first milestone.

12. To make a determination that a construction contract is binding and non-contingent, the Commission has adhered to the requirement that there not be significant delays between the execution of the construction contract and the conditions precedent to construction or actual commencement of construction.<sup>45</sup> Further, in determining whether a satellite system construction contract demonstrates the requisite investment and commitment to meet the two principles described, the Commission has generally considered several factors, including but not limited to the following: 1) the contract sets forth a specific construction schedule that is consistent with the licensee's milestone schedule and that does not unduly postpone commencement of construction work; 2) the licensee is required to make significant initial payments; 3) most of the consideration to be paid by the licensee under the contract will be due well before the end of the construction period; 4) the contract identifies specific satellites and their design characteristics, consistent with the license, in appropriate detail; and 5) obligations under the contract are not contingent upon future performance of an elective action by the licensee.<sup>46</sup> During the milestone review process, if the individual case analysis does not demonstrate that the licensee has met these or related factors, the Commission, in the absence of some countervailing factor, will find that the licensee has not met its first milestone.<sup>47</sup>

**a. The Contract Must Be Binding and Non-Contingent**

13. In the years since the *Tempo Order*, we have clarified that for a contract to be binding and non-contingent, there must be neither significant delays between the execution of the construction contract and the actual commencement of construction nor conditions precedent to construction.<sup>48</sup> In this case, 115 LicenseSub contracted with Loral for significant delays between the execution of the contract and the actual commencement of construction, evidenced by the pace and spacing of payments due in the initial milestones schedule of the contract.<sup>49</sup> On its face, this initial schedule of contract milestones contains significant monthly payment delays. Moreover, the schedule of contract milestones does not require significant enough payment for Loral to commence work, and thus unduly postpones design work in preparation for commencement of construction. The subsequent conduct of the parties confirmed a consistent effort to delay commencement of construction. We find that the pace and spacing of payments within the milestones schedule in the 115 LicenseSub/Loral contract were designed to provide significant delays between the execution of the construction contract and the actual commencement of construction, which is the hallmark of a non-binding contract.

<sup>45</sup> *Globalstar Order*, 19 FCC Rcd at 11551, ¶ 8 (citing *Norris Satellite Communications, Inc.*, Memorandum Opinion and Order, 12 FCC Rcd 22299, 22303-04, ¶ 9 (1997) (*Norris Review Order*); *PanAmSat Licensee Corp.*, Memorandum Opinion and Order, 15 FCC Rcd 18720 (Int'l Bur. 2000); *PanAmSat Licensee Corp Application for Authority to Construct, Launch, and Operate a Ka-Band Communications Satellite System in the Fixed-Satellite Service at Orbital Locations 58° W.L. and 125° W.L.*, Memorandum Opinion and Order, 16 FCC Rcd 11534, 11539, ¶ 16 (2001); and *Mobile Communications Holdings, Inc.*, Memorandum Opinion and Order, 17 FCC Rcd 11898 (Int'l Bur. 2002), *aff'd* 18 FCC Rcd 11650 (2003)).

<sup>46</sup> See, e.g., *Globalstar Order*, 19 FCC Rcd at 11552, ¶ 10 (citing *The Boeing Company*, Order and Authorization, 18 FCC Rcd 12317, 12328-29, ¶¶ 30-31 (Int'l Bur. and OET, 2003)).

<sup>47</sup> *Id.*

<sup>48</sup> *Globalstar Order*, 19 FCC Rcd at 11551, ¶ 8 (Commission citing, with approval, International Bureau decisions on point).

<sup>49</sup> Payment Plan and Termination Liability Schedule (12/14/09) (Exhibit E). See *supra* ¶¶ 4-6.



**b. The Contract Must Demonstrate Investment and Commitment**

14. As explained by the Commission, the second general principle of contract milestone review – a demonstration of the licensee’s investment and commitment– requires that the construction contract set forth a specific construction schedule that is consistent with the milestones in the license, necessitating, in particular, that the licensee make significant initial payments and that the majority of payments be made well before the end of the construction period.<sup>50</sup> The Commission has stated that there must be evidence of the expenditure of funds and significant design work to meet the contract and CDR milestones.<sup>51</sup> 115 LicenseSub’s contract does not meet this standard. The contract failed to commit the parties to a schedule that would meet Commission milestone deadlines.

15. First, as originally signed, the contract failed to set forth a schedule that would enable the licensee to meet the Commission’s CDR milestone. As discussed below, the statement of work contained in the 115 LicenseSub/Loral contract did not include a CDR that would meet the Commission’s CDR milestone. The statement of work in satellite contracts typically includes at least three required technical reviews leading to the completion of design work, culminating in the CDR. They are: (1) a program readiness review (PRR), in which the satellite manufacturer presents its planning, preparation, and readiness to initiate the purchaser’s satellite program; (2) a preliminary design review (PDR), in which the satellite manufacturer establishes the design feasibility and conceptual design of the purchaser’s satellite; and (3) a CDR,<sup>52</sup> in which the manufacturer and the purchaser formally review and agree that the completed satellite design meets the satellite performance specifications in the contract. The Commission has defined CDR as “the stage in the spacecraft implementation process at which the design and development phase ends and the manufacturing phase starts.”<sup>53</sup>

16. The statement of work in the 115 LicenseSub/Loral contract includes these three technical reviews, but 115 LicenseSub and Loral agreed to re-title the reviews, in a way that, in effect, delayed a true CDR until well after required under FCC rules, specifically sixteen months after the CDR was required to take place.<sup>54</sup> What is, virtually word for word, the definition of a PDR in the case of contracts that resulted in successful completion of a construction program, including those previously entered into by Loral, is in 115 LicenseSub’s contract entitled the “Critical Design Review.” The substance of 115 LicenseSub’s purported “CDR” included description of satellite components, which is a precursor to actual design work. As a result of the fact that the purported “CDR” was only a preliminary review, the contract also specified a “Final Design Review,” occurring well after the Commission CDR milestone deadline, but which was in substance a critical design review, i.e., “the stage in the spacecraft implementation process at which the design and development phase ends and the manufacturing phase starts.”<sup>55</sup> The Final Design Review in 115 LicenseSub’s statement of work is, in reality, what is defined in other satellite contracts to be a CDR. Through creative wording in the contract, 115 LicenseSub and

<sup>50</sup> *Globalstar Order*, 19 FCC Rcd at 11552, ¶ 9.

<sup>51</sup> *ATCONTACT Order*, 25 FCC Rcd at 7576, ¶ 25.

<sup>52</sup> *Space Station Licensing Reform Order*, 18 FCC Rcd at 10833, ¶ 191; *The International Bureau Provides Guidance Concerning the Critical Design Review Milestone Requirement*, Public Notice, Report No.: SPB-204, DA 04-787 (rel. Mar. 25, 2004).

<sup>53</sup> *Id.*

<sup>54</sup> Originally, the Final Design Review, or the true CDR, was scheduled to take place eleven months after what is required under the FCC rules. However, subsequent contract amendments delayed the true CDR by an additional five months.

<sup>55</sup> *Space Station Licensing Reform Order*, 18 FCC Rcd at 10833, ¶ 191; *The International Bureau Provides Guidance Concerning the Critical Design Review Milestone Requirement*, Public Notice, Report No.: SPB-204, DA 04-787 (rel. Mar. 25, 2004).

Loral agreed to define away the duty to complete a true CDR by the milestone date in 115 LicenseSub's authorization. Thus, the 115 LicenseSub contract did not enable it to meet the CDR milestone in its FCC license.<sup>56</sup>

17. Furthermore, the pace and spacing of 115 LicenseSub's milestones payments, as discussed above,<sup>57</sup> confirms that the contract did not indicate a schedule capable of meeting requirements for progressing as specified in FCC milestones. As initially filed, 115 LicenseSub contracted to pay a certain amount interspersed over the first year of the contract, but did not make those payments.<sup>58</sup> After executing several amendments and revisions to the contract and delaying several initial payments, the payments made by 115 LicenseSub to Loral up to the contract CDR milestone date were in the hundreds of thousands of dollars and do not amount to significant initial payments, which are typically in the tens of millions of dollars or more.<sup>59</sup>

18. While the Commission does not set a specific dollar amount that the holder of a satellite authorization must pay the satellite manufacturer prior to CDR for a contract to be found binding and non-contingent, it has provided some guidance on the matter. The Commission found that a contract payment schedule in which 23.87 percent of the total contract price was to be paid by the tenth month of the contract period supported a conclusion that a contract was binding and non-contingent.<sup>60</sup> The Commission also concluded that a contract for the construction of two satellites in which 14 percent of the total contract price was scheduled to be paid one fourth of the way through the payment period helped it to reach the conclusion that the contract was binding and non-contingent.<sup>61</sup> The Commission has also held that initial payments of \$3 million in 1992<sup>62</sup> helped to support a conclusion that the contract was binding and non-contingent, and the International Bureau reached the same conclusion where initial payments were \$2.3 million in 1996.<sup>63</sup> In the present case, 115 LicenseSub paid less than one percent of the total contract price at the twelfth month mark and did not make any subsequent payments to Loral.

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<sup>56</sup> The Program Readiness Review (PRR) normally occurs at a very early stage in the process, typically a few months after the contract is signed and several months prior to the CDR. However, the 115 LicenseSub contract milestone schedule initially called for the "Kick Off Meeting and Program Readiness Review" to occur four months after the "CDR" and eight months prior to the Final Design Review as defined in the contract. As amended, the 115 LicenseSub contract milestone schedule deferred that pre-design milestone back even further, to eleven months after the "CDR" and eight months prior to the Final Design Review. Redacted Contract at Exhibit E, the "Payment Plan and Termination Liability Schedule."

<sup>57</sup> See *supra*, ¶¶ 6-8.

<sup>58</sup> As amended, no payments by 115 LicenseSub were due for eight months at the start of the contract. The three small payments made by 115 LicenseSub after contract execution did not commence until milestone month nine, and afterwards 115 LicenseSub was not scheduled to pay Loral again for another eight months.

<sup>59</sup> The Commission has stated that evidence of compliance with the CDR may include evidence of significant expenditures, as required by most construction contracts at the time of the spacecraft CDR. *Space Station Licensing Reform Order*, 18 FCC Rcd at 10833, ¶ 191.

<sup>60</sup> *Application of EchoStar Satellite Corporation for Assignment of Direct Broadcast Satellite Orbital Positions and Channels*, Memorandum Opinion and Order, 7 FCC Rcd 1765, 1769, ¶ 19 (1992).

<sup>61</sup> *Applications of Advanced Communications Corporation and Hughes Communications Galaxy, Inc. For Assignment of Direct Broadcast Satellite Channels and For Extensions of Time to Construct Direct Broadcast Satellite Systems*, Memorandum Report and Order, 6 FCC Rcd 2269, 2272 ¶ 17 (1991).

<sup>62</sup> *Norris Review Order*, 12 FCC Rcd at 22304, ¶ 10.

<sup>63</sup> *Application of Continental Satellite Corporation for Extension of Construction Permit*, Order, 11 FCC Rcd 1157, 1158, ¶ 11 (Int'l. Bur., 1995).



19. In informal discussions with the Satellite Division about the status of the review of the 115 LicenseSub milestones, 115 LicenseSub argued that the Division should look to the Commission's decision regarding the milestone compliance of TMI Communications (TMI).<sup>64</sup> 115 LicenseSub asserted that its contract was better than TMI's contract and we should thus conclude that 115 LicenseSub met the contract milestone. 115 LicenseSub did not make its argument part of the record,<sup>65</sup> and so the argument does not merit any weight in this proceeding. However, if we were to consider 115 LicenseSub's argument, we would find it unpersuasive. The *TMI Order* referred to the fact that \$850,000 had been paid on the contract in the TMI case at the one year mark.<sup>66</sup> 115 LicenseSub argues that it had made a similarly small payment with a better contract, and therefore, we should find that 115 LicenseSub had met its contract milestone. However, in the *TMI Order*, the Commission did not find that TMI met the contract milestone. Rather, the Commission found unique circumstances that justified its decision to grant a waiver of that milestone. TMI had received Commission authorization for market access to the United States. However, the binding, non-contingent satellite contract that was filed with the Commission had been executed between TerreStar and SpaceSystems/Loral, Inc., and TMI was not a party to that contract. Canadian law limited the amount of foreign investment that could be made in a Canadian licensee which provided a "reasonable explanation for the fact that an entity other than the spectrum reservation holder entered into the satellite manufacturing agreement."<sup>67</sup> In the *TMI Order*, the Commission concluded that "there is a satellite proceeding toward construction, and that in light of this and other relevant circumstances, the underlying purposes of the milestone requirement will not be disserved by a waiver of the requirement for TMI to enter into a satellite construction contract."<sup>68</sup> The record in the TMI case also supported the notion that significant design work had taken place toward the completion of the satellite. While 115 LicenseSub contends that advance design work was not needed,<sup>69</sup> in our experience, we find that significant design work is necessary to design a satellite to provide service in a new frequency band.<sup>70</sup> 115 LicenseSub was constructing a satellite in the recently established 17/24 GHz BSS and we believe that significant advance design work would have been required for 115 LicenseSub in order to complete construction of this particular type of satellite on schedule.<sup>71</sup>

20. Based upon the Commission's definition of a successful CDR and past Commission and Bureau precedent, it is evident that 115 LicenseSub does not meet the requirement that its contract

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<sup>64</sup> *TMI Communications and Company, Limited Partnership and TerreStar Networks Inc. Application for Review and Request for Stay*, Memorandum Opinion and Order, 19 FCC Rcd 12603 (2004) (*TMI Order*).

<sup>65</sup> The matter of TMI Communications was raised in a meeting between representatives of 115 LicenseSub and staff on June 12, 2014. Because 115 LicenseSub is the only party to this proceeding, the meeting did not require a disclosure under the Commission's *ex parte* rules. 47 C.F.R. § 1.1208 note 1. 115 LicenseSub did not elect to supplement the record to incorporate the matters discussed at the June 12, 2014 meeting.

<sup>66</sup> *TMI Order*, 19 FCC Rcd at 12614, n.72.

<sup>67</sup> *Id.* at 12619, ¶ 41.

<sup>68</sup> *Id.* at 12603, ¶ 1.

<sup>69</sup> 115 LicenseSub Request for Extension of Milestone at 10.

<sup>70</sup> Advance design work is required for planned bent-pipe (transparent repeater) communication satellite payloads that contain new frequency bands. For a 17/24 GHz BSS satellite, this design work includes, at a minimum, advance design of the following items: uplink antenna feeds; low-noise amplifiers; input de-multiplexers; local oscillators; frequency downconverters; pre-amplifiers; travelling-wave-tube amplifiers; output multiplexers; and downlink antenna feeds. In addition, redundancy switch matrices and uplink and downlink antenna reflectors probably require advance design work. Once the electrical requirements and the physical shapes, masses, and thermal characteristics of these components are known, the design of the payload power supplies and the payload supporting structure and heat dissipation system can be undertaken.

<sup>71</sup> See generally, *17/24 GHz BSS Report and Order*, 22 FCC Rcd 8842 (discussing technical requirements for 17/24 GHz BSS space stations).

demonstrate investment and commitment. The contract failed to set forth a schedule that would enable the licensee to meet the Commission's CDR milestone. In the statement of work provided by 115 LicenseSub, the technical reviews were retitled so as to delay the true CDR until well after the CDR milestone had passed. Finally, the total amount 115 LicenseSub paid to Loral was insufficient for the International Bureau to determine that 115 LicenseSub was demonstrating investment and commitment to complete the construction of the satellite system within the time frame specified in the license.

## 2. CDR Milestone

21. The Commission has repeatedly stated that CDR is "the stage in the spacecraft implementation process at which the design and development phase ends and the manufacturing phase starts."<sup>72</sup> Although the Commission has not prescribed a particular method for demonstrating that the CDR milestone has been met, evidence of compliance may include: (1) evidence of significant expenditures, as required by most construction contracts at the time of the spacecraft CDR; (2) affidavits from independent manufacturers; and (3) evidence that the licensee has ordered all the long lead items needed to begin physical construction of the spacecraft.<sup>73</sup>

22. We find that the CDR package submitted by 115 LicenseSub falls far short of what is required to demonstrate compliance with the CDR milestone. The technical data 115 LicenseSub submitted in its CDR data package shows that the major components of a satellite have been identified, but it does not show how the components have been integrated into a functional electrical and mechanical design specific to 115 LicenseSub's satellite.<sup>74</sup> This is because 115 LicenseSub had not contracted for the completion of the design and development phase for this satellite within two years of its authorization, and, as a result, that phase had not ended by December 2010. Statements in the 115 LicenseSub contract indicate that significant design work remained to be performed after 115 LicenseSub's "CDR." Consequently, by contract definition, the design and development phase has not ended and a true CDR has not occurred. Indeed, based on the minimal amounts expended, there is reason to question whether design work specific to 115 LicenseSub ever began. In addition, there is no evidence of the significant expenditures typical in connection with CDR.<sup>75</sup> On this record, we conclude that 115 LicenseSub failed to meet the CDR milestone.

## IV. CONCLUSION

23. Based on the evidence that 115 LicenseSub did not have a binding, non-contingent contract for satellite construction on a schedule consistent with its milestones, and that it did not conduct a critical design review, we find that 115 LicenseSub has failed to meet its burden of proof that it satisfied either the first or the second milestone in its authorization. Consequently, the full amount of the bond, \$3 million, is now due to the U.S. Treasury.

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<sup>72</sup> *Space Station Licensing Reform Order*, 18 FCC Rcd at 10833, ¶ 191; *The International Bureau Provides Guidance Concerning the Critical Design Review Milestone Requirement*, Public Notice, Report No.: SPB-204, DA 04-787 (rel. Mar. 25, 2004).

<sup>73</sup> *Space Station Licensing Reform Order*, 18 FCC Rcd at 10833, ¶ 191.

<sup>74</sup> Since the satellite is based on a Space Systems/Loral model that has been used for other types of satellites as well, many of the major components of the satellite are "heritage" components. Thus, selection of these components does not demonstrate that Loral completed design work specific to a satellite for 115 LicenseSub.

<sup>75</sup> See *EchoStar Corporation, Application to Authorize Operations of the EchoStar 8 Satellite at the 86.5° W.L. Orbital Location*, Memorandum Opinion and Order, 26 FCC Rcd 10442, 10444, ¶ 7, n.17 (2011); *Advanced Communications Corporation Application for Extension of Time to Construct, Launch, and Operate A Direct Broadcast Satellite System*, Memorandum Opinion and Order, 11 FCC Rcd 3399, 3418, ¶ 50 (1995).

**V. ORDERING CLAUSES**

24. Accordingly, IT IS ORDERED that 115 License Subsidiary, LLC's request for release of its bond is DENIED.

25. IT IS FURTHER ORDERED that 115 License Subsidiary, LLC's bond is now due and payable to the U.S. Treasury.

26. This action is taken under delegated authority pursuant to Sections 0.51 and 0.261 of the Commission's rules, 47 C.F.R. §§ 0.51, and 0.261.

FEDERAL COMMUNICATIONS COMMISSION

Mindel De La Torre  
Chief  
International Bureau